

1. Descriptions of fourteen new Species of Shells from China, Japan, and the Andaman Islands, chiefly collected by Deputy Surgeon-Gen. R. Hungerford. By G. B. SOWERBY, F.Z.S., F.L.S.

[Received October 23, 1888.]

(Plate XXVIII.)

MUREX SUPERBUS, n. sp. (Plate XXVIII. figs. 10, 11.)

Testa fusiformis, solidula, albida, profuse fusco variegata; spira mediocriter elongata; anfractus 9, convexi, subrotundati, embryonales 1½, laeves, sequentes longitudinaliter nodoso-plicati, varicibus 3, subangulatis squamosis hic illic spinosis muniti, liris transversis numerosis undulatis granulatis eximie fusco alboque articulatis cincti; ultimus spiram superans, superne subinflatus, basin versus attenuatus, in caudam oblique recurvam desinens, varicibus 3, subrotundatis, mediocriter elevatis, eximie squamosis, infra medium egregie laminato-frondosis instructus; apertura rotunde ovata, parviuscula, in canalem fere clausum desinens, intus cærulea; peristoma album, margine collumellari albo, laevi, externo ad limbum crenato. Operculum typicum.

Long. 70, maj. diam. 32 mill.; apertura 18 millim. longa, 15 lata.

Hab. Hongkong.

A very beautiful shell, bearing no very close resemblance to any hitherto described species. In form it is, perhaps, most nearly represented by *M. senegalensis*. The canal, or rostrum, is directed obliquely and curved upwards. The surface of the shell is exquisitely ornamented with fine beaded ridges, articulated with brown and white, and the varices are fringed with short vaulted scales, which become longer and frondose towards the base.

A single specimen in perfect condition, brought by Dr. Hungerford from Hongkong, is the only one at present known. Now in the collection of Mr. J. J. MacAndrew.

MITRA EXQUISITA, n. sp. (Plate XXVIII. fig. 7.)

Testa elongata, subcylindraceo-fusiformis, multicostata, carneo-albida, fulvo fuscoque interruptim fasciata; spira turrita, acuminata, subgradata, ad apicem acuta; anfractus 10, superne rotunde angulati, deinde levissime convexi; costis 13-16, conspicuis leviter planulatis muniti, spiraliter inter costas sulcati; anfr. ultimus oblongus, spiram aliquanto superans, fasciis 2-3, fulvo fuscoque balteatus, et linea interrupta supra medium cinctus, basin versus attenuatus, leviter recurvatus, oblique sulcatus; apertura angusta, intus purpureo-fusco tincta, lirata; labrum subacutum, politum, haud crenulatum; columella inaequaliter 4-5-plicata.

Long. 23, maj. diam. 7; apert. long. 11, maj. lat. 1¾ millim.

Hab. Port Blair, Andaman Island.

A pretty little species of the *Turricula* section. Of the four

specimens brought by Dr. Hungerford, one is less closely ribbed than the others, and is a trifle larger than the type, of which the dimensions are given above; while the two others are considerably smaller. The spiral sulci on the upper whorls, and on the upper part of the last whorl, are interrupted by the longitudinal ribs, while those towards the base cross them obliquely. The painting consists principally of three broad bands of yellowish buff and brown, and the two larger specimens exhibit a line of the lighter colour interrupted by the ribs, situated a little above the middle of the body-whorl.

MITRA BRIONÆ, n. sp. (Plate XXVIII. figs. 3, 4.)

Testa fusiformis, solidiuscula; spira acuminata, turrata, ad apicem acuta; anfractus 9, convexiusculi, longitudinaliter costati, sulcis haud profundis superne sculpti, primi 4-5 nigro-fusco suffusi, sequentes fulvo-fusci, albo unifasciati, interdum fusco bilineati; costis (in anfr. ult., penult. et antepenult.) superne angulatis; anfr. ultimus mediocriter elongatus, zona lata viridescenti-fusca cinctus, angulatus, supra angulum levissime concavus, basin versus leviter attenuatus, vix recurvatus, oblique sulcatus; costis ad angulum latis conspicuis, deinde evanidis; apertura mediocriter lata, intus lirata; labrum leviter incrassatum, politum, nigro-fuscum; columella inæqualiter quadriplicata.

Long. 37, *maj. diam.* 13; *apert. longa* 20, *maj. lat.* 4 millim.

Hab. Port Blair, Andaman Island.

A pretty species of the "Turricula" section, and allied to *M. vulpecula* and *M. corrugata*, but evidently distinct. The three specimens collected by Dr. Hungerford are all characterized by a brown belt with a greenish tinge, surmounted by a narrow white band.

MITRA MILLEPUNCTATA, n. sp. (Plate XXVIII. figs. 5, 6.)

Testa oblongo-ovata, utrinque acuminata; spira parviuscula, acuta; sutura impressa; anfractus 7-8, convexi; liris numerosis sub-nodulosis, lira minore intercurrente spiraliter sculpti, longitudinaliter inconspicue sulcati, maculis minutis fuscis, multiseriatim dispositis ornati; anfractus ultimus subventricosus, fulvo bifasciatus, basin versus leviter contractus, haud recurvatus; apertura mediocriter lata, labrum crenulatum, columella inæqualiter sex-plicata.

Long. 24, *maj. diam.* 9; *apert. longa* 15, *maj. lat.* 3½ millim.

Hab. Port Blair, Andaman Island.

An exquisite little species of the "Scabricula" section, with a shorter spire than others of the group; the spiral ridges are numerous and very slightly nodulous, with a very fine (in some cases duplicate) ridge running between. The painting consists of numerous minute brown spots and two rather faint buff bands.

PLEUROTOMA NOTATA, n. sp. (Plate XXVIII. fig. 17.)

Testa elongato-fusiformis, albida, fulvo fuscoque fasciata, strigata

et notata; spira elongata, acuminata; anfractus 14, planato-convexi, superiores angulati, infra suturam excavati, liris numerosis parum elevatis, fusco minute notatis, lira minore intercurrente spiraliter sculpti; sutura anguste canaliculata; anfractus ultimus subrotundatus, ad basin valde contractus, et mediocriter productus; apertura ovata, fauce albida; columella rectiuscula, glabra, labro arcuato, sinu profundiusculo emarginato, canali breviusculo.

Long. 55, *maj. diam.* 17 millim.

Hab. Hongkong.

A *Pleurotoma* belonging to the section "*Turris*," and allied to *P. cingulifera*; transversely finely ridged throughout, the ridges being articulated with minute brown dots.

PLEUROTOMA (BELA) LACEYI, n. sp. (Plate XXVIII. fig. 15.)

Testa fusiformis, utrinque acuminata, sordide alba; spira elongata, acuminata; anfractus rotunde convexi, longitudinaliter oblique multiplicati, spiraliter liris numerosis angustis confertis rotundatis sculpti; anfractus ultimus superne rotundatus, inferne attenuatus, paulo productus; apertura elongato-ovata, columella leviter contorta, labro leviter arcuato, sinu latiusculo haud profundo emarginato; canali brevi.

Long. 16, *maj. diam.* 5 millim.

Hab. Hongkong.

A species resembling in form *Bela pyramidalis* (Strönn), closely sculptured with spiral ridges and longitudinal ribs.

PLEUROTOMA (BELA) HONKONGENSIS, n. sp. (Plate XXVIII. fig. 16.)

Testa abbreviata, alba; spira abbreviato-turrita; anfractus 6, primi 2 laeves, rotundati, sequentes angulati, valde clathrati; sutura impressa; anfractus ultimus pyriformis, superne angulatus, supra angulum leviter concavus, infra angulum convexus, undique liris spiralibus elevatis (circ. 10) et laminis longitudinalibus magis numerosis clathratus; apertura oblonga, columella leviter sinuata, labro vix emarginato.

Long. 6, *maj. diam.* 3 millim.

Hab. Hongkong.

A small white species of the typical form of the Arctic *Bela*, very strongly and beautifully latticed throughout.

ONISCIA MACANDREWII, n. sp. (Plate XXVIII. figs. 1, 2.)

Testa subovata, solidiuscula, albida, fusco fasciata, et irregulariter fulvo fuscoque maculata; spira acuta, gradata; anfractus 7, primi 2-3 laeves, rotundati, sequentes 2 spiraliter sulcati, inconspicue longitudinaliter plicati, deinde angulati et cancellati; anfr. ultimus longitudinaliter dense lamellosus, costis circ. 11 rotundatis ubique nodulosus transversim instructus, superne angulatus, supra angulum concavus, infra angulum convexus, turgidulus, basin versus leviter contractus, ad canalem levissime re-

curvus; *columella late expansa, irregulariter pustulata et plicata*; *labrum incrassatum, reflexum, liris brevibus dentiformibus munitum.*

Long. 45, *maj. diam.* 23; *apert. long.* 29, *maj. lat.* 5 millim.

Hab. Japan.

An interesting new species, intermediate in form between *O. cancellata* (Sowb.) and *O. ponderosa* (Hanley). The former is common at Hongkong, and the latter, quoted in the Paetel catalogue as inhabiting Japanese waters, is extremely rare. Compared with *O. cancellata*, the new species is much more gibbous and pyriform, and the transverse ridges are not raised into prickly scales on the ribs; the colouring is also different, consisting principally of angular blotches of light and dark brown. Compared with *O. ponderosa* it is much higher in the spire, and the nodules are much smaller and less prominent. Two specimens found by Dr. Hungerford, the most perfect of which is now in the collection of Mr. James J. MacAndrew.

CANCELLARIA FUSCA, n. sp. (Plate XXVIII. fig. 12.)

Testa elongata, utrinque acuminata, solidiuscula, fusca, spira turrita, gradata; *anfractus 7, sutura excavata divisi, primi 2 (embryonales) læves, sequentes leviter convexi, spiraliter filo striati, longitudinaliter costati, costis rotundatis, subcrenulatis, superne angulato-productis*; *anfractus ultimus superne angulatus, ad angulum fascia pallida obscure cincta, supra angulum excavatus, infra angulum mediocriter convexus, costis longitudinalibus circ. 8 munitus, basin versus attenuatus, anguste umbilicatus*; *apertura elongato-subtrigona, fauce fusca, obscure lirata*; *columella leviter depressa, polita, oblique triplicata*; *labrum arcuatum, politum.*

Long. 14, *maj. diam.* 7; *apert. long.* 7, *maj. lat.* 3 millim.

Var. minor. *Testa brevior, magis inflata.*

Long. 8, *maj. diam.* 5 millim.

Hab. Hongkong.

This species is allied to *C. costifera* (Sowb.), of an almost uniform brown colour, with an elevated spire and an excavated suture. The longitudinal ribs are slightly nodulous or crenulated. Of the four specimens in the Hungerford collection three are of the variety *minor*.

CALLIOSTOMA HUNGERFORDI, n. sp. (Plate XXVIII. fig. 14.)

Testa conica, imperforata, grisea, cæruleo-tincta, fusco sparsim maculata, ad apicem nigro-fusca, ad basin fusco triseriatim punctata; *spira acutiuscula*; *anfractus 7, sutura impressa divisi, convexi, obtuse angulati, striati, spiraliter irregulariter lirati, liris supremis minutissime granulatis*; *anfr. ultimus obscure biangulatus, ad basin convexus, dense spiraliter liratus, et decussatim striatus*; *apertura oblique subquadrata*; *columella leviter obliqua, margaritacea. Operculum tenue, corneum, multispirale, extus concavum.*

Alt. 24, *maj. diam.* 25 millim.

Var. β . *Testa fulva, albo fuscoque obscure strigata.*

Alt. 29, *diam.* 28 millim.

Hab. Japan.

Allied to *Trochilus unicus* (Dunker) and *Trochilus consors* (Lischke), but differing from both in form and sculpture. The species, like *T. unicus*, seems to vary considerably in colour. Only one specimen of each of the two varieties is at present known.

MINOLIA CHINENSIS, n. sp. (Plate XXVIII. fig. 13.)

Testa conica, mediocriter umbilicata, grisea, strigis albidis angustis, undulatis (ad basin magis conspicuis) undique ornata, nitida; spira acutiuscula, mediocriter elevata, gradata; anfractus 7, sutura impressa divisi, striis obliquis tenuissimis sculpti, superne bicarinati; anfractus ultimus infra obtuse angulatus, ad angulum carinatus, ad basin convexus, plus minusve spiraliter sulcatus; umbilicus rotundus, profundus, liratus; apertura oblique subquadrata. Operculum corneum, tenue, multispirale, extus concavum.

Alt. 10, *maj. diam.* 11 millim.

Hab. Hongkong.

In form like *Minolia biangulata* (Angas), but much larger, obliquely striated, and without the beaded ridge bordering the umbilicus. The interior of the umbilicus is spirally grooved.

TURCICA CHINENSIS, n. sp. (Plate XXVIII. figs. 8, 9.)

Testa trochiformis, alba; spira elata, acuta; anfractus 9, sutura canaliculata divisi, primi 2-3 laeves, ceteri concavo-declives, oblique obscure striati, superne concavo-depressi, plicis numerosis rugosis coronati, inferne carina rotundata corrugata spiraliter marginati, infra carinam profunde canaliculati et foveolati; basi convexa, costis 6 confertiusculis, rugoso transversim plicatis, interstitiis foveolatis sculpta; apertura subrotunda, fauce margaritacea, lirata; columella rectiuscula, margaritacea, obscure unituberculata.

Alt. 20, *maj. diam.* 19 millim.

Hab. Hongkong.

Compared with *Turcica elisæ* (A. Adams), the body-whorl is larger in proportion to the spire, the keel more prominent, and the suture more deeply excavated. The whorls have two rounded nodulous keels, the space between which is smooth excepting for the fine oblique striæ. The base is strongly corded and deeply pitted. Of the only two specimens known, one is in the National Collection at South Kensington, and the other in that of Mr. MacAndrew.

DENTALIUM COMPRESSUM, n. sp. (Plate XXVIII. fig. 18.)

Testa latiuscula, fere recta, acuta, inæqualiter compressa, versus apicem leviter inclinata; fulva, fusco irregulariter fasciata; costellis inæqualibus numerosissimis plano-convexis sculpta, striisque vix conspicuis transversis cancellata; fissura longa, angusta; apertura subovalis.

Long. 72, *maj. diam.* 12 millim.

Hab. Hongkong.

A very distinct and remarkable species, more highly coloured than its congeners; but it is chiefly distinguished by its curiously compressed form. A second specimen, brought by Dr. Hungerford, is only 62 millimetres in length, and rather wider in proportion. It is rather lighter in colour, but presents all the same characters, confirming the specific importance of the chief characteristic, which might otherwise have been thought accidental.

PECTUNCULUS YESSOENSIS, n. sp. (Plate XXVIII. fig. 19.)

Testa suborbicularis, compressa, solida, sordide alba, zonis maculisque rufo-fuscis angulatis picta, striis minimis decussatim sculpta; umbones acutiusculi, approximati; area ligamenti parva et angusta; margo dorsalis anticus longiusculus declivis, posticus elongatus valde declivis, obtuse angulatus; margo ventralis anticus valde arcuatus, posticus obscure angulatus; epidermis fusca, holoserica; pagina interna alba; crenæ in margine ventris longiusculæ, crassæ.

Diam. antero-post. 48, umbono-marg. 45 millim.

Hab. Yesso, Japan.

In painting and sculpture this species is not very unlike some varieties of *P. glycimeris* of our seas, but may at once be recognized by its sloping dorsal margins and posterior angle.

EXPLANATION OF PLATE XXVIII.

- Fig. 1, 2. *Oniscia macandrewi*, p. 567.
 3, 4. *Mitra brionæ*, p. 566.
 5, 6. — *millepunctata*, p. 566.
 7. — *exquisita*, p. 565.
 8, 9. *Turcica chinensis*, p. 569.
 10, 11. *Murex superbus*, p. 565.
 12. *Cancellaria fusca*, p. 568.
 13. *Minolia chinensis*, p. 569.
 14. *Calliostoma hungerfordi*, p. 568.
 15. *Pleurotoma (Bela) laceyi*, p. 567.
 16. — (—) *hongkongensis*, p. 567.
 17. — *notata*, p. 566.
 18. *Dentalium compressum*, p. 569.
 19. *Pectunculus yessoensis*, p. 570.

2. List of the Lepidoptera Heterocera, with Descriptions of the new Species, collected by Mr. C. M. Woodford at Aola, Guadalcanar Island, Solomon Islands. By HERBERT DRUCE, F.L.S., F.R.G.S., F.Z.S., &c.

[Received November 13, 1888.]

(Plate XXIX.)

The collection of which this paper gives an account formed part of the second series of insects brought to this country by Mr. Woodford. It was made at Aola on Guadalcanar Island, and contains examples of a considerable number of species that were not in the